

Homework 23

Hand in: _____

Do not use a calculator for questions 1-10. You must show all of your working out. You may need to look up definitions or ask for some extra help either at home or at school for some of these questions.

<p>1. Simplify the expression,</p> $2a^2 + 3a + 4a^2 + 3ab$	<p>2. Expand the bracket and simplify;</p> $2(3x + 5) + 12$
<p>3. Find the value of the expression when $a = 4$ and $b = 9$</p> $a^2 + 3b$	<p>4. Write a set of 5 numbers which have a median of 11</p> <p>____, _____, _____, _____, _____</p>

5. If $\frac{5}{12}$ of an amount is 55.
What is the amount?

6. Equivalent FDP. Fill in the missing values.

Fraction	Decimal	Percentage
$\frac{7}{4}$		

7. Find 7.5 % of 120

8. Share £160 in the ratio
2 : 3 : 5

9. A Dressmaker uses 1.5m of fabric to make a blouse. How much fabric is needed to make 6 blouses?

10. Work out the value of;

$$2 + 3^2 - 24 \div 8$$

Gold:

Place brackets in these calculations to make the answers correct, you may need more than one pair:

$$3 + 1 \times 5 = 20$$

$$7 - 3^2 \times 8 - 3 = 80$$

$$3 \times 10 - 4 = 18$$

$$4 + 3 \times 2 + 5 = 49$$

$$4 + 9 \div 3 + 2^2 = 81$$

Silver:

Which of the following 3 calculations gives the largest solution? You must show all of your working out. You may not use a calculator.

A: $7 - 4 \times (8 - 2^2)$

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B: $7 - 4 \times (8 - 2)^2$

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C: $(7 - 4) \times (8 - 2)^2$

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Bronze:

Alice, Ben and Charlie are given the following question:

$$3 + 8 \times 12 - 3$$

Alice says that the answer is 129,
Ben disagrees and says that it is 96.
Charlie is certain that the answer is 99.
Who is correct? Explain your answer.

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